

### **Amendments to the Claims:**

This listing of claims will replace all prior versions and listings of claims in the application.

### **Listing of Claims:**

Claims 1-189. (Cancelled)

190. (New) A filter media comprising a fine fiber layer and a substrate having a basis weight of about 8 to 200 grams/meter<sup>2</sup>, the fine fiber comprising a polyvinyl alcohol having a fiber size of about 0.01 to 0.5 micron, the substrate comprising a filtration medium; wherein after exposure to air at 140°F and 100% relative humidity for 1 to 16 hours at least 50% of the fine fiber remains substantially unchanged.

191. (New) The media of claim 190 wherein the fine fiber comprises a blend of two polyvinyl alcohol polymers and has a diameter of 0.01 to 0.5 micron.

192. (New) The media of claim 190 wherein the fine fiber has a diameter of 0.01 to 0.2 micron.

193. (New) The media of claim 190 wherein the media, when exposed to an air stream having a temperature of about 140°F and a relative humidity of about 100%, greater than about 50% of the fiber survives for more than 16 hours.

194. (New) The media of claim 190 wherein the substrate comprises a woven or non-woven substrate.

195. (New) The media of claim 194 wherein the non-woven substrate comprises a fiber selected from cellulose, glass, polymer, metal, and combinations thereof.

196. (New) The media of claim 190 wherein the substrate comprises spunbonded polymeric non-woven fabric.

197. (New) The media of claim 190 wherein the substrate comprises a non-woven polymeric fabric.

198. (New) The media of claim 197 wherein the fine fiber comprises a crosslinked polyvinyl alcohol.

199. (New) The filter media of claim 198 wherein the crosslinking agent comprises urea formaldehyde, melamine formaldehyde, phenol formaldehyde, or mixtures thereof.

200. (New) The fine fiber of claim 198 wherein the crosslinking agent comprises a dialdehyde, trialdehyde, tetraaldehyde, a diacid, a urethane reactant, epoxy reactant, or mixtures thereof.

201. (New) A filter media comprising a fine fiber layer and a substrate having a basis weight of about 8 to 200 grams/meter<sup>2</sup>, the fine fiber comprising a polymer selected from the group consisting of:

- (a) a nylon 66, the fine fiber having a fiber size of about 0.01 to 0.5 micron;
- (b) a blend of a hydrophobic additive and a polymer comprising a blend of at least two different nylon polymers, the fine fiber having a fiber size of about 0.01 to 0.5 micron;
- (c) a blend of a hydrophobic additive and a nylon polymer comprising a nylon other than a copolymer formed from a cyclic lactam and a C<sub>6-10</sub> diamine monomer or a C<sub>6-10</sub> diacid monomer, the fine fiber having a fiber size of about 0.01 to 0.5 micron; or
- (d) mixtures thereof; wherein after exposure to air at 140°F and 100% relative humidity for 1 to 16 hours at least 50% of the fine fiber remains substantially unchanged; the substrate comprising a filtration medium.

202. (New) The media of claim 201 wherein the fine fiber comprises a blend of two nylon polymers and has a diameter of 0.01 to 0.2 micron.

203. (New) The media of claim 201 wherein the fine fiber layer survives immersion in hot water at 140°F and at least 50% of the fiber survives after 5 minutes.

204. (New) The media of claim 201 wherein the media, when exposed to an air stream having a temperature of about 140°F and a relative humidity of about 100%, greater than about 50% of the fiber survives for more than 16 hours.

205. (New) The media of claim 201 wherein the substrate comprises a woven or non-woven substrate.

206. (New) The media of claim 205 wherein the non-woven substrate comprises a fiber selected from cellulose, glass, polymer, metal, and combinations thereof.

207. (New) The media of claim 201 wherein the substrate comprises spunbonded polymeric non-woven fabric.

208. (New) The media of claim 201 wherein the substrate comprises a non-woven polymeric fabric.

209. (New) A filter media comprising a fine fiber layer and a substrate having a basis weight of about 8 to 200 grams/meter<sup>2</sup>, the fine fiber comprising a polymer selected from the group consisting of:

(a) an acrylic polymer having a fiber size of about 0.01 to 0.5 micron;

(b) a blend of a hydrophobic additive and a polymer comprising a blend of at least two different acrylic polymers, the fine fiber having a fiber size of about 0.01 to 0.5 micron; and

(c) mixtures thereof; the substrate comprising a filtration media wherein after exposure to air at 140°F and 100% relative humidity for 1 to 16 hours at least 50% of the fine fiber remains substantially unchanged; the substrate comprising a filtration medium.

210. (New) The media of claim 209 wherein the fine fiber layer can be exposed to an alcoholic solvent at 70°F and wherein at least 50% of the fiber remains after 5 minutes.

211. (New) The media of claim 209 wherein the fine fiber layer survives immersion in hot water at 140°F and at least 50% of the fiber survives after 5 minutes.

212. (New) The media of claim 209 wherein the media, when exposed to an air stream having a temperature of about 140°F and a relative humidity of about 100%, greater than about 50% of the fiber survives for more than 16 hours.

213. (New) The media of claim 209 wherein a temperature of 160°F is used.

214. (New) The media of claim 209 wherein the substrate comprises a woven or non-woven substrate.

215. (New) The media of claim 214 wherein the non-woven substrate comprises a fiber selected from cellulose, glass, polymer, metal, and combinations thereof.

216. (New) The media of claim 209 wherein the substrate comprises spunbonded polymeric non-woven fabric.

217. (New) The media of claim 209 wherein the substrate comprises a non-woven polymeric fabric.

218. (New) The media of claim 217 wherein the fine fiber comprises a microfiber having a diameter of about 0.1 to 0.5 micron.

219. (New) The media of claim 217 wherein the fine fiber comprises a nanofiber having a diameter of about 0.01 to 0.2 micron.

220. (New) A filter media comprising a fine fiber layer and a substrate having a basis weight of about 8 to 200 grams/meter<sup>2</sup>, the fine fiber comprising the reaction product of a polymer resin and a cross linking agent, the fiber having a fiber size of about 0.01 to 0.5 micron, the substrate comprising a filtration media; wherein after exposure to air at 140°F and 100% relative humidity for 1 to 16 hours at least 50% of the fine fiber remains substantially unchanged; the substrate comprising a filtration medium.

221. (New) The media of claim 220 wherein the fine fiber comprises a blend of two polymer resins and has a diameter of 0.01 to 0.2 micron.

222. (New) The media of claim 220 wherein the media, when exposed to an air stream having a temperature of about 140°F and a relative humidity of about 100%, greater than about 50% of the fiber survives for more than 16 hours.

223. (New) The media of claim 220 wherein the substrate comprises a woven or non-woven substrate.

224. (New) The media of claim 223 wherein the non-woven substrate comprises a fiber selected from cellulose, glass, polymer, metal, and combinations thereof.

225. (New) The media of claim 220 wherein the substrate comprises spunbonded polymeric non-woven fabric.

226. (New) The media of claim 220 wherein the substrate comprises a non-woven polymeric fabric.

227. (New) The filter media of claim 220 wherein the crosslinking agent comprises urea formaldehyde, melamine formaldehyde, phenol formaldehyde, or mixtures thereof.

228. (New) The fine fiber of claim 220 wherein the crosslinking agent comprises a dialdehyde, trialdehyde, tetraaldehyde, a diacid, a urethane reactant, epoxy reactant, or mixtures thereof.

229. (New) A filter media comprising a fine fiber layer and a substrate having a basis weight of about 8 to 200 grams/meter<sup>2</sup>, the fine fiber comprising an electrospun fiber comprising the reaction product of a polymer resin and a crosslinking agent, the substrate comprising a filtration media; wherein after exposure to air at 140°F and 100% relative humidity for 1 to 16 hours at least 50% of the fine fiber remains substantially unchanged; the substrate comprising a filtration medium.

230. (New) The media of claim 229 wherein the fine fiber comprises a blend of two polymer resins and has a diameter of 0.01 to 0.5 micron.

231. (New) The media of claim 229 wherein the fine fiber has a diameter of 0.01 to 0.2 micron.

232. (New) The media of claim 229 wherein the media, when exposed to an air stream having a temperature of about 140°F and a relative humidity of about 100%, greater than about 50% of the fiber survives for more than 16 hours.

233. (New) The media of claim 229 wherein the substrate comprises a woven or non-woven substrate.

234. (New) The media of claim 233 wherein the non-woven substrate comprises a fiber selected from cellulose, glass, polymer, metal, and combinations thereof.

235. (New) The media of claim 229 wherein the substrate comprises spun bonded polymeric non-woven fabric.

236. (New) The media of claim 229 wherein the substrate comprises a non-woven polymeric fabric.

237. (New) The filter media of claim 229 wherein the crosslinking agent comprises urea formaldehyde, melamine formaldehyde, phenol formaldehyde, or mixtures thereof.

238. (New) The fine fiber of claim 229 wherein the crosslinking agent comprises a dialdehyde, trialdehyde, tetraaldehyde, a diacid, a urethane reactant, epoxy reactant, or mixtures thereof.